DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 82.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-019042
Date Inspected: 16-Dec-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Westmont Industries

OSM Arrival Time: 700
OSM Departure Time: 1530
Location: Santa Fe Springs, CA.

CWI Name: Ruben Dominguez

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☐ Yes	☐ No	☑ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
				Approved WPS:	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: Travelers

Summary of Items Observed:

The Quality Assurance Inspector Sean Vance arrived on site at Westmont Industries (WMI) in Santa Fe Springs, CA, to randomly observe the in process welding, QC inspection and non-destructive testing of the Travelers. Upon the arrival of the QA Inspector, the following observations were made:

Traveler Test Rack

On this date, the QA Inspector observed WMI production personnel performing fitting, welding and cutting activities on various assemblies for the Traveler Test Rack.

SAS-EB Traveler

Fixed Stairs Section

On this date, the QA Inspector observed Westmont Industries (WMI) production welder, Mr. Jose Rodriguez (WID # 3031), performing backgouging and Flux Core Arc Welding (FACW) activities on the Frame Assembly identified as 11-B237. The QA Inspector observed that these activities were being performed on the weld joints identified as # 183 and # 193. The QA Inspector observed that these activities were being performed on the previously discovered rejectable indications, which were discovered by SE QC Inspector Ruben Dominguez, during the Ultrasonic Testing (UT) of the Complete Joint Penetration (CJP) welds, on this Frame Assembly. Initially, the QA Inspector observed WID # 3031, Mr. Jose Rodriguez utilizing the Carbon Arc process to perform the backgouging activities, on the above mentioned weld joints. After utilizing the Carbon Arc process, the QA Inspector then observed Mr. Rodriguez utilizing a mechanical grinder with an attached burring bit, to clean the joint to sound metal. After grinding, the QA Inspector observed that each of the above mentioned welds had been completely removed, including the root pass and the joints appeared to have been prepared to a single bevel. The

QA Inspector then observed Mr. Rodriguez performing FCAW activities on the above mentioned weld joints. During observation, the QA Inspector noted that SE QC Inspector Ruben Dominguez was present and had performed measurements on the above mentioned excavations, utilizing a steel ruler, to insure defect removal on the weld joints. The QA Inspector also observed that Mr. Dominguez was present during the FCAW activities being performed by Mr. Rodriguez, to insure that the applicable Welding Procedure Specification (WPS), was being utilized. After completion of the repairs, the QA Inspector observed Mr. Dominguez perform what appeared to be 100% Visual Testing (VT). Mr. Dominguez then explained to the QA Inspector that the repairs appeared to be in compliance with AWS D1.1 and no rejectable indications were found. Mr. Dominguez further explained that 100% Ultrasonic Testing (UT) will be performed after the repairs have cooled to ambient temperature. Later, the QA Inspector observed Mr. Dominguez observed utilizing what appeared to be a 70 degree Lucite wedge coupled to a .625" (16 mm) diameter, 2.25 MHz transducer, to perform a shear wave inspection, on the above mentioned repairs. During observation, the QA Inspector noted that the scanning pattern being performed by Mr. Dominguez appeared to be in compliance with AWS D1.1 2002, Figure 6.24 and that the testing appeared to be 100% coverage. After testing, Mr. Dominguez explained to the QA Inspector that no rejectable indications were found and an applicable form SE-UT-D1.1-CT-104, will be completed to document the acceptable weld repairs. The QA Inspector observed that the above mentioned activities appeared to be in compliance with AWS D1.1 2002 and the contract requirements.

Lower Truss Section
On this date, the QA Inspector observed that no production activities were being performed on the Lower Truss Section.

E2/E3-EB Traveler.
On this date, the QA Inspector observed WMI production welder Mr. Juan Jimenez (WID # 3059) continuing to perform Flux Core Arc Welding (FCAW) welding activities on the Frame Assembly identified as 9-A332, per the shop drawings.
The QA Inspector observed throughout the shift, that the FCAW was being performed in various positions, on the connector plate and Tube Steel (TS) material fillet and flare groove welds.

On this date, the QA Inspector observed Westmont industries (WMI) production welder, Mr. Charles Newton (WID # 3200) continuing to perform fitting and Flux Core Arc Welding (FCAW) activities on material, for the E2/E3-EB Traveler. The QA Inspector observed that the material appeared to be identified as Stair Risers to Stair Braces, for the Elevating Platform Assembly. The QA Inspector observed that Mr. Newton was performing the FCAW in various positions and the welds appeared to be designated as fillet and flare groove. In addition, the QA Inspector observed Mr. Raymundo Anaya (WID # 3196) performing fitting and tacking activities on tube steel (TS) material. The QA Inspector observed that the activities were being performed on the TS material, which will be utilized for the handrails, for the above mentioned assembly.

The QA Inspector randomly observed that Smith-Emery QC Inspector Ruben Dominguez was present, during the above mentioned welding and fitting activities. During random observation, the QA Inspector observed that the applicable WPS's and copies of the shop drawings,appeared to be located near each work station, where the above mentioned welding and fitting activities were being performed. The QA Inspector randomly verified that the consumable material, utilized during the welding appeared to be in compliance with the applicable WPS and that the above mentioned welders were currently qualified for the applicable process and position of welding. The QA

Inspector randomly observed QC Inspector Dominguez verifying the in-process welding parameters, including voltage, amperage, pre-heat and travel speed and the parameters appeared to be in compliance to the applicable WPS.

Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Vance,Sean	Quality Assurance Inspector
Reviewed By:	Edmondson,Fred	QA Reviewer